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L1 ANSWER 1 OF 1 CA COPYRIGHT 2002 ACS
AN ***130:96383*** CA
TI Polymer compositions with good water resistance, high thermal conductivity, and less ionic component elution
IN Shimoda, Manabu; Yasutake, Takeshi; Harada, Isao
PA Mitsui Chemicals Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
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DT Patent
LA Japanese
IC ICM C08L101-00
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CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 39
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11005907	A2	19990112	JP 1997-159842	19970617

AB Title compns., useful as sealants or adhesives for electronic parts, comprise (A) 100 parts polymers, (B) 50-600 parts water-resistant AlN powders contg. phosphoric acid compds., and (C) fluidity improvers. Thus, a compn. contg. 100 parts silicone rubber and 80 parts water-resistant Al nitride powders (contg. 2.0% water-repellent silica and 1.0% orthophosphoric acid) was kneaded and extrusion-molded to give a molding with good water resistance, high thermal cond., and less ionic component elution.

ST water resistance thermal conductor polymer blend; aluminum nitride phosphoric acid polymer blend; silicone rubber aluminum nitride blend waterproof; epoxy resin aluminum nitride blend waterproof; polyamide aluminum nitride blend waterproof

IT Thermal conductors
Water-resistant materials
(polymer compns. contg. aluminum nitride with good water resistance, high thermal cond., and less ionic component elution)

IT Epoxy resins, properties
Fluoropolymers, properties
Phenolic resins, properties
Polyamides, properties
Polycarbonates, properties
Polyesters, properties
Polyimides, properties
Polyoxyphenylenes
Polysiloxanes, properties
Polyurethanes, properties
Silicone rubber, properties
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(polymer compns. contg. aluminum nitride with good water resistance, high thermal cond., and less ionic component elution)

IT 1344-28-1, Alumina, properties 10043-11-5, Boron nitride, properties 13463-67-7, Titania, properties
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(fluidity improver; polymer compns. contg. aluminum nitride with good water resistance, high thermal cond., and less ionic component elution)

IT 7429-90-5D, Aluminum, org. compds., reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with ammonia; polymer compns. contg. aluminum nitride with good water resistance, high thermal cond., and less ionic component elution)

IT 7664-41-7, Ammonia, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with org. Al compds.; polymer compns. contg. aluminum nitride with good water resistance, high thermal cond., and less ionic component elution)

IT 7631-86-9, Silica, properties

RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(water-repellent, fluidity improver; polymer compns. contg. aluminum nitride with good water resistance, high thermal cond., and less ionic component elution)

IT 7664-38-2, Phosphoric acid, properties
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(water-resistant Al nitride contg.; polymer compns. contg. aluminum nitride with good water resistance, high thermal cond., and less ionic component elution)

IT 24304-00-5, Aluminum nitride
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(water-resistant; polymer compns. contg. aluminum nitride with good water resistance, high thermal cond., and less ionic component elution)